

Mineral Industry Surveys

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MANGANESE IN SEPTEMBER 2006

On a gross-weight basis, consumption of manganese ore containing 35% or more manganese, exclusive of that consumed at iron and steel plants, was 33,600 metric tons (t) in September 2006, three times those of the revised amount (10,900 t) in August 2006, according to the U.S. Geological Survey. Corresponding industry stocks of ore at the end of the month were 203,000 t, which was an 11% decrease from the revised amount (229,000 t) at the end of August 2006. These data include estimates for annual respondents on the basis of 2005 data.

Domestic consumption of manganese ore during the third quarter of 2006 was 76,400 t, which was a 22% decrease from that during the second quarter of 2006 (revised to 98,000 t), and

an 11% decrease from the revised third quarter of 2005 (85,600 t). Domestic consumption during the first 9 months of 2006 was 260,000 t, which was 12% lower than the revised consumption for the first 9 months of 2005 (295,000 t).

The following comparisons of trade data were made on the basis of manganese content (table 1). The data for August 2006 tabulated in this report indicate that the total exports of 874 t were 92% less than those of the prior month, owing primarily to decreases in exports of ferromanganese. Manganese imports were 60,100 t, which was a decrease of 28% compared with those of July 2006. This decrease was primarily attributable to decreases in manganese ore imports.

Ferroalloy Prices, manganese content

	High-carbon ferromanganese ¹ (dollars per gross ton)	Medium-carbon ferromanganese ¹ (cents per pound)	Silicomanganese ¹ (cents per pound)	Manganese metal ² (cents per pound)
September 7	1,025.00-1,075.00	73.00-75.00	42.00-45.00	74.00-77.00
September 14	1,000.00-1,075.00	73.00-75.00	42.00-45.00	74.00-77.00
September 21	975.00-990.00	73.00-75.00	40.00-45.00	74.00-77.00
September 28	940.00-975.00	73.00-75.00	40.00-42.00	74.00-77.00

Ore Prices, dollars per metric ton unit, manganese content³

	44% Manganese Ore ²	48% Manganese Ore ²
September 7	1.90-2.00	2.30-2.40
September 14	1.90-2.00	2.30-2.40
September 21	2.00-2.10	2.35-2.45
September 28	2.00-2.10	2.35-2.45

¹Source: Platts Metals Week, dealer import price.

²Source: Ryan's Notes, North American transaction price.

³To determine dollars per metric ton, multiply the manganese content percentage by the price.

TABLE 1
SELECTED U.S. FOREIGN TRADE IN MANGANESE¹

(Metric tons, manganese content)²

	Imports for consumption			Exports		
	Ore and dioxide	Ferroalloy and metal	Total	Ore	Ferroalloy and metal	Total
2005:						
August	23,800	25,400	49,100	234	1,360	1,600
January-August	190,000	310,000	500,000	3,900	9,290	13,200
2006:						
January	20,300	25,600	45,900	46	1,710	1,760
February	27,500	52,800	80,200	87	1,170	1,260
March	4,970	47,400	52,300	63	1,660	1,720
April	30,300	34,800	65,200	25	661	686
May	7,140	46,300	53,400	40	609	648
June	26,800	52,600	79,400	101	753	853
July	39,300	44,400	83,700	95	11,200	11,300
August	5,710	54,400	60,100	36	838	874
Total	162,000	358,000	520,000	492	18,600	19,100

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²As reported except as estimated for imports of manganese dioxide and manganese waste and scrap and for exports from gross weights.

Source: U.S. Census Bureau.

TABLE 2
U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE IN AUGUST 2006¹

(Metric tons)

Source	Gross weight	Mn content	Customs value ²	Year to date		
				Gross weight	Mn content	Customs value ²
Australia	1,200	780	\$864,000	13,500	8,960	\$8,690,000
Austria	--	--	--	1,100	668	406,000
Canada	--	--	--	741	525	452,000
France	--	--	--	11	7	3,620
Georgia	11,800	8,640	7,420,000	33,700	24,300	22,200,000
Korea, Republic of	200	123	236,000	13,000	8,330	9,920,000
Mexico	1,900	1,240	1,310,000	11,600	7,610	8,050,000
Netherlands	--	--	--	42	25	48,100
Norway	58	34	65,500	52,600	32,700	44,700,000
Russia	--	--	--	3,960	2,030	2,920,000
Saudi Arabia	6,500	4,320	3,950,000	7,510	4,820	4,370,000
South Africa	19,800	13,100	14,100,000	110,000	72,300	72,400,000
Total	41,400	28,200	27,900,000	248,000	162,000	174,000,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the material into the United States.

Source: U.S. Census Bureau.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN AUGUST 2006¹

(Metric tons)

Source	Gross weight	Mn content	Customs value ²	Year to date		
				Gross weight	Mn content	Customs value ²
Low carbon:						
Canada	22	21	\$34,200	42	37	\$57,700
China	1,900	1,610	2,140,000	12,000	10,100	14,400,000
Japan	2,000	1,610	2,180,000	3,500	2,810	3,690,000
Korea, Republic of	1,500	1,260	1,670,000	7,810	6,410	7,760,000
Mexico	20	17	40,800	5,140	4,140	5,300,000
Norway	56	45	72,400	1,080	869	1,350,000
South Africa	80	74	121,000	2,240	2,050	3,260,000
Total, low carbon	5,580	4,640	6,260,000	31,800	26,500	35,800,000
Medium carbon, (m.c.) 1%-2% C:						
Brazil	--	--	--	1,540	1,230	1,480,000
Canada	60	47	68,800	137	109	156,000
China	260	203	228,000	4,630	3,750	4,220,000
Korea, Republic of	3,000	2,450	2,980,000	11,600	9,360	9,990,000
Mexico	450	359	217,000	10,200	8,150	7,470,000
Nauru	--	--	--	36	30	43,900
Norway	673	550	784,000	2,360	1,930	2,770,000
South Africa	2,800	2,290	2,640,000	23,800	19,400	19,100,000
Total, m.c., 1%-2% C	7,240	5,890	6,920,000	54,300	43,900	45,300,000
Medium carbon, 2%-4% C:						
Brazil	--	--	--	19	14	19,300
Georgia	--	--	--	1,470	1,160	637,000
Total, m.c., 2%-4% C	--	--	--	1,490	1,170	657,000
High carbon:						
Australia	--	--	--	4,000	3,090	2,240,000
Brazil	169	125	151,000	7,690	6,020	4,490,000
Canada	--	--	--	97	58	61,200
China	2,080	1,590	1,470,000	6,680	5,090	4,460,000
France	--	--	--	1,500	1,170	764,000
Korea, Republic of	900	684	653,000	7,400	5,620	4,870,000
Mexico	--	--	--	26	20	29,300
Norway	--	--	--	21	18	25,400
Poland	308	243	295,000	592	465	567,000
South Africa	11,500	8,870	8,090,000	103,000	79,400	58,700,000
Ukraine	--	--	--	1,120	873	678,000
Total, high carbon	14,900	11,500	10,700,000	132,000	102,000	76,900,000
Grand total	27,800	22,000	23,800,000	220,000	173,000	159,000,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the material into the United States.

Source: U.S. Census Bureau.

TABLE 4
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE ORE (20% OR MORE Mn) IN AUGUST 2006^{1,2}

(Metric tons)

Source	Gross weight	Mn content	Customs value ³	Year to date		
				Gross weight	Mn content	Customs value ³
More than 20%, but less than 47% manganese:						
Brazil	--	--	--	1,730	784	\$227,000
Canada	--	--	--	6,510	1,850	309,000
China	--	--	--	1,380	435	74,000
Mexico	--	--	--	2,950	1,030	353,000
South Africa	--	--	--	34,100	13,000	2,540,000
Total	--	--	--	46,700	17,100	3,500,000
47% or more manganese:						
Australia	--	--	--	25,000	12,800	3,900,000
Belgium	18	13	\$14,500	231	166	193,000
Brazil	60	51	53,300	6,900	4,630	1,150,000
China	1,390	708	92,000	4,300	2,260	502,000
Gabon	6,500	3,380	1,200,000	182,000	93,600	19,500,000
Morocco	18	12	9,000	38	29	15,000
South Africa	--	--	--	35,700	17,300	3,360,000
Total	7,980	4,160	1,360,000	254,000	131,000	28,700,000
Grand total	7,980	4,160	1,360,000	301,000	148,000	32,200,000

-- Zero.

¹Quantities for general imports and imports for consumption are identical.

²Data are rounded to no more than three significant digits; may not add to totals shown.

³Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the material into the United States.

Source: U.S. Census Bureau.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE IN AUGUST 2006¹

(Metric tons, gross weight)

Source	Quantity	Customs value ²	Year to date	
			Quantity	Customs value ²
Australia	1,290	\$1,750,000	7,010	\$9,780,000
Belgium	31	53,300	532	1,210,000
Brazil	96	91,600	283	242,000
China	405	413,000	10,700	11,300,000
Colombia	--	--	8	14,400
France	--	--	3	29,400
Germany	2	10,500	25	132,000
Indonesia	--	--	40	74,500
Japan	747	1,040,000	4,810	6,670,000
Mexico	--	--	150	183,000
Netherlands	--	--	1	4,290
United Kingdom	(3)	2,130	(3)	13,400
Total	2,570	3,360,000	23,500	29,700,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the material into the United States.

³Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE METAL IN AUGUST 2006¹

(Metric tons)

Source	Gross weight	Customs value ²	Year to date	
			Gross weight	Customs value ²
Unwrought flake:				
China	3,440	\$4,370,000	12,200	\$15,400,000
Hong Kong	--	--	18	23,800
South Africa	78	125,000	2,780	4,510,000
Total	3,520	4,490,000	15,000	20,000,000
Unwrought powder:				
China	100	125,000	1,280	1,610,000
South Africa	273	487,000	2,460	4,450,000
Total	373	612,000	3,740	6,050,000
Unwrought, other:				
China	52	82,200	869	1,460,000
Germany	24	44,100	399	740,000
South Africa	--	--	700	1,200,000
Spain	--	--	439	733,000
Total	76	126,000	2,410	4,130,000
Other manganese, wrought:				
Brazil	--	--	463	601,000
China	60	84,000	486	625,000
France	--	--	11	109,000
Jamaica	--	--	(3)	3,000
Mexico	20	34,700	60	92,300
Netherlands	--	--	15	30,800
United Kingdom	--	--	2	5,250
Total	80	119,000	1,040	1,470,000
Grand total	4,050	5,350,000	22,200	31,600,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the material into the United States.

³Less than ½ unit.

Note: Imports for consumption of metallic manganese waste and scrap totaled 42 tons, all of which was from Canada, to give a year-to-date total of 608 tons.

Source: U.S. Census Bureau.

TABLE 7
U.S. EXPORTS OF MANGANESE ORE (20% OR MORE Mn), FERROMANGANESE,
SILICOMANGANESE, AND MANGANESE METAL BY COUNTRIES OF DESTINATION IN AUGUST 2006¹

(Metric tons, gross weight)

	Manganese ore		Ferromanganese, 2% or less C		Silicomanganese		Manganese metal ²	
	August	Year to date	August	Year to date	August	Year to date	August	Year to date
Argentina	--	--	--	--	--	--	--	3
Australia	--	--	--	--	4	14	--	3
Belgium	--	--	--	--	--	--	175	1,020
Brazil	--	--	--	--	40	40	--	24
Canada	54	753	31	4,060	290	333	117	408
Chile	--	--	--	--	--	--	--	14
China	--	35	--	--	--	--	--	--
Colombia	--	--	--	--	--	--	--	7
Dominican Republic	--	9	--	--	--	--	--	--
France	--	--	--	--	--	--	79	226
Germany	19	73	--	--	--	--	16	146
Hong Kong	--	--	--	--	--	--	--	50
India	--	--	--	--	--	--	--	21
Indonesia	--	23	--	--	38	72	8	8
Japan	--	51	--	--	--	--	29	635
Korea, Republic of	--	--	--	--	--	--	39	41
Malaysia	--	--	--	--	--	--	--	8
Mexico	--	--	--	25	20	129	6	19
Netherlands	--	--	--	100	--	13	--	--
Poland	--	21	--	--	--	--	--	--
Portugal	--	--	--	--	--	--	--	2
Sweden	--	19	--	--	--	--	--	26
Trinidad and Tobago	--	--	--	--	--	--	--	1
United Kingdom	--	--	--	--	--	--	--	15
Total	72	985	31	4,190	392	601	468	2,670

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes manganese-aluminum, some other alloys, and waste and scrap.

Note: Exports of ferromanganese with more than 2% carbon totaled 110 tons, of which 102 tons went to Canada and 8 tons went to Mexico, to give a year-to-date total of 15,500 tons.

Source: U.S. Census Bureau.

TABLE 8
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN AUGUST 2006, BY CLASS¹

Class	Gross weight (metric tons)	Value ² (thousands)	Principal sources and destinations: gross weight (metric tons); value ² (thousands)	Year to date		
				Gross weight (metric tons)	Value ² (thousands)	Principal sources and destinations: gross weight (metric tons); value ² (thousands)
Imports for consumption:						
Manganese oxides other than dioxide	598	\$622	China 332; \$416	5,210	\$5,020	China 2,660; \$3,480
Manganites, manganates, and other permanganates	--	--	--	16	34	Japan 16; \$34
Potassium permanganate	141	320	India 81; \$191	809	1,810	Czech Republic 363; \$782
Sodium permanganate	--	--	--	27	27	China 27; \$27
Sulfates, basket category, including manganese sulfate	2,360	1,380	China 1,070; \$695	29,400	16,700	China 14,600; \$6,830
Exports:						
Manganese dioxide	621	589	Canada 362; \$188	3,670	3,560	Canada 1,970; \$1,170
Manganese oxides other than dioxide	1,640	981	Canada 1,270; \$458	16,500	8,240	Canada 14,000; \$5,080
Manganites, manganates, and other permanganates	6	16	Canada 6; \$16	42	98	Canada 42; \$98
Potassium permanganate	206	471	Belgium 78; \$129	1,690	4,150	Spain 695; \$1,510
Sodium permanganate	26	86	China 17; \$46	958	2,890	Spain 399; \$1,490
Sulfates, basket category, including manganese sulfate	1,990	1,360	Canada 1,490; \$708	15,700	11,200	Canada 11,800; \$6,040

-- Zero.

¹Data are rounded to no more than three significant digits.

²For imports, Customs value; for exports, free alongside ship value.

Source: U.S. Census Bureau.